



# **Investment Opportunities** in Agriculture and Food Processing

Alberta offers prospective investors or processors an excellent opportunity to participate in a diverse and dynamic economy-the agricultural and food processing industry. The tradition of efficient agricultural production provides a strong base for expanding processing and manufacturing of agricultural commodities to service a growing marketplace. Alberta has long been recognized as a receptive and profitable location for domestic and international investment.

This publication provides a brief overview of the Alberta Advantage. It highlights the key advantages and factors for investors to consider, provides a snapshot Alberta's competitive agriculture and food sector, and profiles some of the specific investment opportunities that are available. These profiles are presented in the form of fact sheets covering several product categories. They outline the market trends and potential opportunities.

Those seeking to explore investment or strategic alliance opportunities in Alberta's agriculture and food industry will find that Alberta Agriculture, Food and Rural Development is ready to help. We hope the information included in this booklet encourages you to consider the many possibilities that are available and look to Alberta as the place to invest.

## **Growing Opportunities**

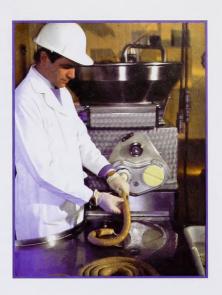
The rapidly changing global economy is creating many new opportunities for Alberta's agri-food industry. The demand for food and other agricultural products is being driven by several key trends:

- World population is expected to increase by 2.6 billion in the next 47 years, to reach 8.9 billion in 2050. That is an addition of 77 million people per year.
- Trade agreements, modern technology, transportation systems and sophisticated communications systems are facilitating greater international access and movement of goods and services.



- World trade in agricultural products is continuing to grow with demand shifting dramatically from bulk commodities to consumer ready foods.
- Value-added products and niche markets are anticipated to grow rapidly. In addition, markets for new products, such as functional foods and food ingredients, industrial and non-food uses are also expected to grow.
- Environmental issues are becoming increasingly important. As a result, there is market differentiation for clean, wholesome and safe products.

Alberta offers a positive economic and natural environment. As a major agricultural region, strategically situated to serve significant markets, Alberta is a great place to do business.



## **The Alberta Advantage**

Investors in Alberta's agri-food processing industry enjoy favorable conditions unique to our province. Key competitive advantages include:



#### Low-Cost Business Environment

Alberta has one of the lowest tax regimes in Canada, including low provincial personal income tax rates, no provincial payroll and capital taxes, and no provincial sales tax. In addition, Alberta has low cost industrial and residential real estate, low trucking rates and electrical and natural gas rates that are some of the lowest in North America.



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#### Abundant, High-quality Raw Materials

With more than 52 million acres presently used for crop and livestock production, Alberta has one of the most productive agricultural economies and a surplus supply of grains, oilseeds and meat. Agricultural research has resulted in better production methods, new crop varieties and the largest and most varied genetic pool of breeding livestock in the world.



#### Strategic Location

Alberta is strategically situated to deliver goods quickly and inexpensively to Western Canada and the rapidly expanding markets in the pacific and northwestern United States, as well as Pacific Asia and the Russian Far East. With effective road, rail and air links to markets, Alberta has become a major distribution centre.





#### Productive Workforce

The province boasts a skilled and highly educated workforce as almost half hold post-secondary degrees, diplomas or certificates. Per capita productivity is the highest in Canada. Labor relations are also among the most stable with less than the Canadian average days lost to labor disputes.



#### First-class R&D Facilities

Alberta's extensive networks of research and development facilities and institutions help develop and commercialize advanced products and processes. Alberta's 29 post-secondary institutions include four universities and two technical institutes. Funding agencies that support agri-food research include the Alberta Agricultural Research Institute and AVAC.



#### Quality of Life

With a reputation for natural scenic beauty, friendly people and cultural diversity, Alberta offers a high quality of life and an active lifestyle.





### Alberta's Growing Agri-food Industry



Alberta's economy is strong. Energy and agriculture continue to be major contributors. While primary agriculture contributes over \$8.3 billion in farm cash receipts each year, the food and beverage industry has grown to become the province's largest manufacturing sector. It accounted for \$9.9 billion in revenue in 2001, which is 23 per cent of Alberta's total manufacturing.

The immense size of Alberta's agricultural land base ensures continued growth for our food and beverage industry. Alberta accounts for 22.9 per cent of Canadian

agricultural production with only 10 per cent of Canada's population. Along with 42 per cent of Canada's beef cattle supply, Alberta has abundant supplies of grain, dairy products, pork, poultry, vegetables, sugar and cooking oils. This resource base provides Alberta's food processors and manufacturers with a tremendous capacity to expand production.



### Alberta's Largest Manufacturing Industry

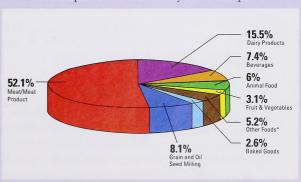
Since 1980, Alberta's food and beverage industry has grown at an annual rate of five per cent. This growth has consolidated the food and beverage industry's position as the manufacturing sector's largest employer in Alberta. The industry now employs over 23,000 people and consists of over

500 firms located throughout rural and urban Alberta.

Alberta's food and beverage industry is export oriented and has a worldwide reputation for quality products. The United States remains the largest export market for Alberta's processed foods, purchasing nearly 54 per cent of the province's exports. The Pacific Rim is also fast becoming an important foreign market for Alberta's food products.

Strength in the industry has prompted multi-national food and beverage companies to make major investments in Alberta.

#### Alberta's Food and Beverage Industry 2001 Shipments - % Shared by Food Groups



\* Other Foods include snack food, seasoning, dressings and all other food manufacturing not included otherwise.

### **Meat Sector**

Meat and meat products contributed \$5.1 billion in revenue, almost half of the total value of shipments for Alberta's food and beverage industry. The red meat sector is ranked as Alberta's third largest manufacturing industry with sales of \$3.7 billion in 2001. The poultry industry (chicken, turkey and fowl) is also a significant contributor to Alberta's meat industry. Alberta has 36 federally registered meat and poultry facilities, and 103 provincially inspected red meat and poultry facilities. Federally registered plants are eligible to sell into export markets.

### Beef:

- Alberta is the largest processor of beef products in Canada, accounting for 59 per cent of the cattle slaughter in Canada in 2001.
- Barley-fed animals are the foundation of Alberta beef, which is famous for its tenderness and flavor.
- Alberta has four federally registered beef slaughter plants, with a capacity to process approximately 46,000 head per week. The two largest are Cargill Foods (High River) and Lakeside Packers (Brooks).
- In 2001, Alberta exported \$1.7 billion of beef and veal (fresh, frozen and chilled) including edible offal.

### Pork:

- Alberta is Canada's third largest pork processing province.
- Alberta has four federally registered hog processing plants with a capacity to slaughter 53,500 hogs per week.
- In 2001,Alberta exported \$217 million of fresh and processed pork products, including edible offal.

### Poultry:

- Alberta has the fourth largest chicken production in Canada. Alberta produced 105.3 million kilograms in 2001.
- The Alberta poultry industry is supplied by 11 commercial hatcheries with a total incubation and hatching capacity of 6.9 million eggs.



• There are four major federally registered slaughter facilities, two further processing facilities and several provincially licenced poultry facilities throughout the province.

### Other Livestock:

- Approximately 70,000 sheep and lambs were slaughtered in federally and provincially inspected plants in 2001.
- In 2001, there were approximately 79,000 bison in Alberta, representing 55 per cent of the Canadian population. Approximately 10,000 animals were slaughtered.

### The Marketplace:

Alberta's beef industry has been on the increase for the last five years. Modern, efficient beef processing plants are one reason for Alberta's large slaughter numbers. The beef industry has concentrated its activities in five areas: carcass beef, boxed beef, variety meats (offal), cured hides and value-added specialty products. Most of the beef is exported outside of the province. The primary markets in Canada are British Columbia, Ontario and Quebec. The major international markets are the United States and Asian countries.

The hog industry in Alberta is also on a growth trend with production expected to double in the next five years. Alberta hog plants are using the latest technology, such as hot water pasteurization, blast chilling and computerized carcass movement control, to maximize retail shelf life. Processors are able to ship fresh chilled pork directly to Asia through a well developed transportation infrastructure. Major export markets for fresh and processed pork products are the US, Japan and Korea.





Alberta's poultry industry is supply managed with a quota system administered by four marketing boards. Currently, the domestic market is the focus of the Alberta poultry industry. Alberta's poultry processing plants utilize some of the most efficient technology in Canada.

Product development is strong as shown by the high percentage of further processed products.

## Alberta Advantage - Market Trends and Potential:

The marketplace for meat and meat products changes along with consumer lifestyle. Opportunities exist for innovative, value-added product development in all the meat groups. Expanding markets will include the retail, deli and foodservice industries, as well as export sales. There will be an opportunity for portion

control, case-ready, nutritious ready-to-eat or easy-to-cook products and meat snacks.

The entire meat packing industry is increasing its focus on developing new export markets and products. Currently, marketing efforts are primarily directed towards consumers in North America, Japan, Korea, Taiwan, Southeast Asia and Mexico. China and Russia are emerging markets.

Increased livestock production will not only provide opportunity for value-added meat product development, but also for further development of animal by-products.

Quality assurance programs are being developed and implemented by producers and processors for continual improvement of product quality. Research and development continues to play a vital role in the growth of Alberta's meat industry by contributing to advances in genetic, reproductive and new processing technologies. Production efficiency, innovative value-added product development and expanding overseas markets will be key to the success of the meat industry in Alberta.

### **Processed Feed Sector**

The livestock feed industry in Alberta includes sectors that are engaged in pelleting and manufacturing complete feeds. The dehydrated alfalfa industry and the hay compactors represent key segments of the forage processing industry. Continued growth in Alberta's primary livestock production sectors will promote further development in these sectors.

### Processed Feed at a Glance:

- The value of processed feed in 2001 was \$575 million.
- The complete feed industry is comprised of 11 feed companies, representing 27 primary feed mills. This industry has a combined processing capacity of about 1.5 million metric tonnes.
- Seven plants produce over 400,000 tonnes of dehydrated alfalfa pellets and cubes, accounting for 50 per cent and 85 per cent of the Canadian total, respectively. These plants use only five per cent of the alfalfa produced in the province.
- Exports of compressed hay from Canada to Japan has grown from 25,000 tonnes in 1991 to over 196,000 tonnes in 2001.

### The Marketplace:

The market for much of the feed industry remains local with the exception of the dehydrated alfalfa market which is primarily export-oriented. Most exports are to Japan, but significant volumes are also destined for South Korea. Taiwan and the U.S.

The feed industry has undergone significant rationalization and the top four companies represent 60 per cent of the feed capacity in the province. Alberta continues to see the introduction of new players into the feed industry.

## Alberta Advantage - Market Trends and Potential:

Growth in the feed industry is dependent upon growth in the livestock industry. The level of vertical integration and supply contracts for both the poultry and pork sectors will direct growth in this part of the industry.

The area of greatest potential growth for processed forages appears to be compressed hay due to the Asian interest in long fibre material.

## **Beverage Sector**

Alberta's beverage industry has experienced tremendous growth both in terms of diversity of products and the number of companies in the last few years. The industry consists of major products such as distilled spirits, beer, wine and non-alcoholic beverages. Non-alcoholic beverages include soft drinks and bottled water.

### Berverages at a Glance:

- The total value of production for Alberta's beverage industry grew to \$872 million in 2001.
- The Alberta beverage industry consists of 12 soft drink companies, seven breweries, three distilleries and one winery.
- The value of soft drink production was \$405 million in 2001.
- The total value for brewery products was \$467 million in 2001.

### The Marketplace:

The industry leader in Alberta is soft drinks, including various water products. Growth continues with specialty beverages such as ready-to-drink teas and sports drinks.

Alberta's brewery products industry has recently stabilized with slight increases. Canada's two major breweries, Labatt Breweries, owned by Interbrew, and Molson Breweries, hold over 90 per cent of the

Canadian beer market. Both have plants located in Alberta. In addition, Alberta has nine micro breweries.



## Alberta Advantage - Market Trends and Potential:

Alberta's beverage industry offers numerous advantages for potential investors. One area of potential is in bottled water. This area is considered underdeveloped with Canadian consumers drinking about 10 per cent of the quantities consumed in Europe. Alberta's natural advantages provide an opportunity to capitalize on the potential growth of the domestic and export markets.

The Alberta average annual consumption of soft drinks is 137.6 litres, 21 per cent more than the Canadian average, however Canadian consumption of soft drinks is still about half of the U.S. average. Per capita soft drink consumption has increased by more than 17 per cent over the last eight years. The soft drink industry continues to benefit from rising per capita consumption rates and the trend towards alternative beverages has provided market niches for flavored waters and other product innovations.

The consumption of beer, spirits and wine has decreased over the last 10 years in Canada and the U.S. There is a trend away from hard liquor towards lower alcohol content, fermented beverages such as beer and wine. The trend towards specialty beers has proven strong in Alberta, providing a market niche for craft brewers.



## **Dairy Sector**

The Alberta dairy processing sector contributes about 15 per cent of the total value of Alberta food and beverage production. Dairy products in this sector include: fluid milk, butter, processed cheese, cheddar cheese, specialty cheeses, cottage cheese, ice cream, yogurt, sour cream, novelties, condensed milk, skim milk powder and whey powder.

### Dairy at a Glance:

- Alberta ranks third behind Quebec and Ontario in total milk production, accounting for eight per cent of the estimated Canadian herd.
- There are about 775 milk producers in Alberta who deliver 616 million litres of milk annually.
- There are 36 federally registered processing facilities in Alberta, ranging from small to large multi-national operations.
- Alberta dairy exports were valued at \$12 million in 2001.

### The Marketplace:



The stability and profitability of both Canada and Alberta's dairy sector is a direct result of national and provincial controls designed to encourage the production of sufficient volumes of industrial milk for domestic market needs, as well as new export market opportunities.

About half of Alberta's milk production is marketed as fluid milk and fresh cream products. The remainder is industrial milk used in the production of a variety of dairy products.

Canada currently accounts for less than one per cent of the international dairy trade. Market opportunities exist in international markets such as Asia for ice cream, cheese and yogurt. Processors and exporters are accessing new export market opportunities



through the Optional Export Program which allows over-quota milk production to be designated for processing into specific export products. Alberta companies have been successful in the export cheese and ice cream markets.

## Alberta Advantage - Market Trends and Potential:

Alberta dairy farms have demonstrated that they have a feed and labor advantage. They also have the lowest cost of production when compared to the rest of Canada. Milk production volumes have been increasing and are predicted to grow at about two per cent per year which is consistent with population growth.

Dairy products that emphasize health/nutrition, low fat, variety, convenience and value are a continual source of growth for this sector. The low-fat or fat-free trend dominates several dairy categories.

Numerous opportunities exist for the development and expansion of new uses for milk and milk components as raw materials and ingredients for food and non-food applications. Good examples are the changes in the per capita consumption patterns within the dairy sector. These include consumers switching to partly skimmed milk and the increased use of flavored coffee creamers. Alberta has also seen an increase in overall cheese production and consumption, specifically in the prepackaged grated and shredded cheese, and snack cheese products.

# Cereal Grain and Flour Sector



Alberta is renown for excellent quality and significant volumes of cereal grains. In addition to feed and export markets, cereal grains are used for milling, malting, baking, nutraceuticals and industrial products.

### Cereals at a Glance:

- In 2001, Alberta's share of Canada's crop production was 46 per cent for barley, 29 per cent for wheat and 21 per cent for oats.
- Wheat is Alberta's largest agri-food export commodity, valued at \$1.7 billion in 2001. Exports of wheat flour were valued at \$148 million.
- The value of shipments from the flour milling industry in Alberta in 2001, was \$148 million.
- The value of shipments from bread and other bakery products was \$227 million.
- This sector includes ten flour mills, representing about 15 per cent of the Canadian wheat milling capacity, and 50 wholesale bakery companies.

### The Marketplace:

Within the bakery industry, the share of total sales among small, medium and large bakery companies has remained stable over the past 10 years. In addition to those bakeries supplying the fresh-baked local specialty market, there are world class production sites manufacturing products for the Canadian market and export. Smaller firms tend to specialize in niche products such as pastries and specialty breads.

The bakery industry in Alberta continues to undergo numerous changes as developments in production technology, packaging and transportation make an array of products available. Bake-off products and frozen dough are also changing the business. Consumers can now access a variety of high quality bakery products, without the high cost of specialty production.

## Alberta Advantage - Market Trends and Potential:

The average daily consumption of grain products is expected to increase. The upward trend in consumption of wheat-based foods is attributed to population growth, consumer preferences, relative prices of other foods, income levels, and the role of health and dietary concern. The trend is credited primarily to the expanded variety of wheat foods and the growth of the aging population.



### **Oilseeds Sector**



Alberta is a major producer of canola and small amounts of flaxseed and other oilseeds are also grown. The oilseeds sector includes crushers, refiners and companies that process oils into salad oils, margarine, shortening and industrial lubricants. Canola meal and other protein byproducts are also produced.

this country, the 2000/01 crop year saw domestic crushings in excess of 3.0 million tonnes. There is an opportunity for an even larger share of the Canadian crop to be crushed here if oil tariffs in export destinations gradually disappear.

Alberta's canola crushing industry has a capacity of about 2,100 tonnes per day or about 630,000 tonnes annually, based on a 300-day season. It is dominated by two major players, Archer Daniels Midland and CanAmera Foods. In addition, there are several small niche players who process oilseeds for specialty markets such as the health food sector.

### **Dilseeds at a Glance:**

- Canola production in Alberta was 1.7 million tonnes in 2001, accounting for more than one-third of the Canadian total. Canada is a key producer of world canola/rapeseed, producing one-fifth of the world output.
- Alberta flax production of about 20,000 tonnes is three per cent of the Canadian total. Canada's share is about one-third of the world total.
- Canola seed (\$447 million), oilseed cake and meal (\$109 million) and canola oil (\$97 million) were three of Alberta's top 10 agrifood exports in 2001.

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### The Marketplace:

Traditionally, most of Canada's canola crop was exported as raw seed for crushing. Overall, canola seed exports have averaged about 3.4 million tonnes annually, with Japan accounting for about 63 per cent of the total.

A greater and greater share of the total crop is being crushed domestically. Despite a 10-year average of just 2.6 million tonnes crushed in

## Alberta Advantage - Market Trends and Potential:

In recent years canola production in Alberta has been increasing. Out-of-province shipments of canola seed and products have seen tremendous growth. Much of this material is destined for Japan and the U.S.

Vegetable oil consumption globally has seen steady growth. Canola has a good reputation for producing a healthy, quality oil. The industry in Alberta is optimistic that further trade liberalization will stimulate further growth in this industry.



### **Specialty and Prepared**

**Foods Sector** 

Specialty food products include gourmet foods, prepared foods and pasta products. Gourmet foods include jams, confections, gourmet pastas, ethnic foods, condiments and sauces. Prepared foods include frozen, refrigerated and fresh entrees, pizzas, sandwiches, soups, meat pies, side dishes and ethnic foods. A new term used to describe a growing category of prepared foods is home meal replacements.

### Specialty Foods at a Glance:

- There are 60 specialty foods companies and 40 prepared foods companies that employ 2,100 individuals in Alberta.
   Pasta companies include two dry pasta and a number of fresh pasta and noodle companies.
- The frozen dinners and entrees sector has grown steadily, with an increase of about 30 per cent over the last three years.
   Convenience and health are the driving forces of this sector.
- The pasta industry is steadily increasing. Canadian consumption reached 184,000 tonnes (\$170 million) in 1996, a 17 per cent increase from 1990.

### The Marketplace:

The majority of specialty food companies in Alberta are small, with fewer than 25 employees. While many only market their products locally, almost one-third export a portion of their output to the United States and/or Pacific Rim countries.



## Alberta Advantage - Market Trends and Potential:

Demographic and lifestyle changes are having large implications on the prepared foods market in terms of consumers eating and meal preparation habits. Trends influencing the market include an expanding immigrant population, more sophisticated tastes due to extensive travel, an aging population, a shift toward smaller households and more women in the work force. As a result, there is a greater demand for foods of a wider variety of tastes, healthier foods and products that are easier to prepare.

Between 1990 and 1996, it is estimated that per capita consumption of pasta in Canada increased by about four per cent annually to 13.5 pounds. This trend is expected to continue because of pasta's relatively low price, convenience, low fat content and long storage life.

Great opportunities exist for Alberta specialty food manufacturers to capture a major share of this growing food industry. Alberta has a wide variety of competitively-priced raw materials and plays a crucial role in the pasta industry as a major supplier of durum semolina. On a geographic basis, Alberta is strategically located to supply the West Coast of Canada and the United States, as well as the Pacific Rim countries. These are expected to represent the fastest growing markets for food as the population in these regions continues to increase.

### **Vegetable Sector**

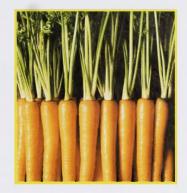
Alberta's vegetable sector includes fresh and processed vegetables, greenhouse vegetables, potatoes and mushrooms. Potatoes account for most of total vegetable production and are marketed as seed potatoes, fresh table potatoes or processed products. The processed products include granules, frozen french fries and potato chips.

### Vegetables at a Glance:

- Over 50 companies package or process a variety of crops including potatoes, onions, peas, carrots, corn, cabbage, sprouts, mushrooms and greenhouse vegetables.
- Potatoes account for 93 per cent of total commercial vegetable production and 80 per cent of vegetable acreage.
- Sixty-eight per cent of Alberta's potato crop is being grown for processing purposes, 25 per cent for seed and seven per cent for fresh market.
- Alberta is a major exporter of seed potatoes, mainly to the U.S.
- Corn, carrots, green peas, cabbage and dry onions account for 76 per cent of vegetable production, other than potatoes. This supplies 18 per cent of Alberta's total
  - annual fresh market.
  - Alberta greenhouse vegetables, primarily cucumbers, tomatoes and peppers are grown on about 83 greenhouse acres.
     The production is worth \$16 million.
  - Seven mushroom operations in Alberta supply \$21 million worth of fresh white button and specialty mushrooms to major retail and food service distributors

### The Marketplace:

Over the past five years, the potato and greenhouse vegetable sectors have seen yearly increases in both volume and value. Processing potato acreage has grown rapidly due to increasing world-wide demand for frozen french fries and potato snack foods.



In the past five years, frozen french fry production has increased dramatically as Maple Leaf Potatoes was joined by new multinational processors. Lamb-Weston, a division of ConAgra, and McCain Foods developed new, state-of-the-art facilities in southern Alberta. In addition, Alberta potatoes are processed into dehydrated potato granules by Vauxhall Foods and into potato snack foods by Hostess Frito Lay and Old Dutch. Processing of other vegetables is limited to freezing and fresh-cut operations.

## Alberta Advantage - Market Trends and Potential:

As Canadian consumers become more aware of the nutrition and health benefits of vegetables, consumption of fresh and frozen vegetables will likely continue to increase. The North American trend toward convenience will continue to drive the popularity of fresh-cut produce and salad mixes. With increasing worldwide demand for frozen french fries, due in part to the growth of fast food franchises and institutional markets, Alberta will be able to capitalize on this opportunity through increased processing capacity. Given the availability of suitable irrigated land for expanded vegetable production by experienced growers, opportunities exist for replacing produce imports and expanding current domestic market share.



### **Assistance**

Those seeking to explore opportunities in our province will find that Alberta Agriculture, Food and Rural Development plays an important role.

The Agri-Food Investment Division provides information and assistance to companies and investors considering capital investment or expansion in Alberta's agri-food processing industry.

### Please contact us for:

- information on investment opportunities and the advantages of doing business in Alberta
- contacts and assistance if you are seeking alliance partners, joint ventures or sources of capital
- coordination of your visitation program to Alberta to meet with government and private company representatives
- information and analysis for emerging investment projects at various stages of planning and development

Alberta has many resources in government and private agencies that can assist with the development of an agri-food processing business. For example, the Food Processing Development Centre includes a fully equipped pilot plant to assist in developing new products and processes. The Agriculture Financial Services Corporation offers a unique portfolio of innovative financing options. The Agri-Food Investment Division can assist you in making the right connections.

If you are interested in exploring some of the many potential processing opportunities in Alberta, please contact:

Alberta Agriculture, Food and Rural Development Agri-Food Investment Division #304, 7000 - 113 Street Edmonton, Alberta Canada T6H 5T6 Telephone: 780 427-7366 Fax: 780 422-3655 URL http://www.agric.gov.ab.ca







For more information on Investment Opportunities in Alberta contact
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